

L4 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
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TI Method for enrichment of unique DNA fragments through cyclical removal of
PCR adapter attached to DNA fragments whose sequences are shared between
two DNA pools.
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SO Official Gazette of the United States Patent and Trademark Office Patents,
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DT Patent
LA English
AB A method of rapid isolation and enrichment of the differences of DNA
fragments between two pools of DNA. These methods feature a process of
converting undesirable **tester** to **driver**, and then
re-utilizing the converted "**driver**" in the **repeats** of
subtraction to achieve double exponential **elimination** of
undesirable **tester** sequence. Improvements include: i) bypassing
the need of PCR amplification or physical separation of desirable
tester from undesirable one in each **repeat** of
subtraction, it **eliminates** the necessity of **tester**
dilution in each **repeat** of subtraction; ii) utilizing the
converted "**driver**" from each **repeat** of subtraction, it
eliminates the need for re-introducing additional **driver**
into hybridization in each repeat of subtraction. These methods typically
include: a) attaching a specific PCR adapter to the 5' and 3' ends of a
DNA fragment from one DNA pool to form "**tester**" (Step A); (b)
tester is mixed with **driver** that is not attached to
adapter; (c) the mixture undergoes denaturing, re-annealing, and is
followed by removal of adapter from **tester/driver**
heteroduplex by single strand DNA specific nuclease; d) the process of (c)
is then repeated at least once.